

WHAT IS CLAIMED IS:

1. A disk device comprising:

a detector section which detects detection signals from reflected lights of laser lights emitted on
5 a disk, the detection signals includes detrack components, which is failed to correctly detected by the detector section;

a removing section which detects the detrack components, and removes the same from the detection
10 signals; and

a processing section which applies a predetermined processing on the detection signals removed detrack components by the removing section.

2. A disk device according to claim 1, wherein

15 the detection signals have a plurality of detection signals from a detector which is divided in plurality, and the removing section detects the detrack components on the basis of magnitude of potentials of the plurality of detection signals.

20 3. A disk device according to claim 1, wherein

the detection signals have four detection signals from a quartered detector, and, when a differential signal between a sum of two signals at one side and a sum of two signals at the other side which are divided into
25 two sides by a track axis of the disk exceeds a predetermined value, the removing section determines that detrack components which have failed to detect

recording information on the disk are included in the detection signals, and removes the detrack components.

4. A disk device according to claim 1, wherein
the removing section receives control signals supplied
5 from a flywheel for estimating a change in a succeeding
detection signal on the basis of a change in a
recording signal which records RF signals amplified
from detection signals detected by the detector section
for a predetermined period, and removes detrack
10 components of the detection signals according thereto.

5. A disk device according to claim 1, wherein
the detection signals have four detection signals from
a quartered detector which receives reflected lights
from DVD (Digital Versatile Disk)-RAM (Random Access
15 Memory), and, when a differential signal between a sum
of two signals in a detector at one side and a sum of
two signals in a detector at the other side which are
divided into two sides by a track axis of the disk
exceeds a predetermined value, the removing section
determines that detrack components which have failed to
20 detect the recording information are contained in the
detection signals, and removes the detrack components
by selecting at least one of the two signals in the
detector at one side and the two signals in the
detector at the other side according to the
25 differential signal.

6. A disk device according to claim 1, wherein

the detection signals have four detection signals from
a quartered detector which receives reflected lights
from DVD-R or DVD-RW, and, when a differential signal
between a sum of two signals in a detector at one side
5 and a sum of two signals in a detector at the other
side which are divided into two sides by a track axis
of the disk exceeds a predetermined value, the removing
section determines that detrack components which have
failed to detect the recording information are included
10 in the detection signals, and removes at least one of
the two signals in the detector at one side and the two
signals in the detector at the other side.

7. A disk device according to claim 1, wherein
the detection signals have four detection signals from
15 a quartered detector which receives reflected lights
from DVD-RAM, DVD-R, or DVD-RW,
the removing section determines that detrack
components which have failed to detect the recording
information are included in the detection signals when
20 a differential signal between a sum of two signals in
a detector at one side and a sum of two signals in
a detector at the other side which are divided into
two sides by a track axis of the disk exceeds
a predetermined value, and
25 identifies a type of the disk, and selects and
removes one of the two signals in the detector at one
side and the two signals in the detector at the other

side according to the differential signal when the disk is DVD-RAM, and

identifies a type of the disk, and removes at least one of the two signals in the detector at one side and the two signals in the detector at the other side when the disk is DVD-R or DVD-RW.

8. A disk device according to claim 1, wherein the removing section passes the detection signals through filters to output the same, and removes the detrack components.

9. A disk device according to claim 1, wherein the removing section removes the detrack components by giving predetermined potentials to input terminals of the processing section instead of supplying the detection signals thereto.

10. A disk device according to claim 1, wherein the removing section removes the detrack components in a state where the detection signals are not supplied to the input terminals of the processing section so that noting is connected thereto.

11. A disk processing method comprising:
detecting detection signals from reflected lights of laser lights emitted on a disk, the detection signals includes detrack components, which is failed to correctly detected by the detector section;

detecting the detrack components, and removing the same from the detection signals; and

applying a predetermined processing on the detection signals removed detrack components.

12. A disk processing method according to claim 11, wherein the detection signals have
5 a plurality of detection signals from a detector which is divided in plurality, and the detrack components are detected on the basis of magnitude of potentials of the plurality of detection signals.

10 13. A disk processing method according to claim 11, wherein the detection signals have four detection signals from a quartered detector, and, when a differential signal between a sum of two signals in a detector at one side and a sum of two signals in a detector at the other side which are divided into
15 two sides by a track axis of the disk exceeds a predetermined value, the step of removing determines that detrack components which have failed to detect recording information on the disk are included in the detection signals, and removes the detrack components.

20 14. A disk processing method according to claim 11, wherein the step of removing receives control signals supplied from a flywheel circuit for estimating a change in a succeeding detection signal on the basis of a change in a recording signal which records RF
25 signals amplified from the detected detection signals for a predetermined period, and removes the detrack components of the detection signals according thereto.

15. A disk processing method according to
claim 11, wherein the detection signals have four
detection signals from a quartered detector which
receives reflected lights from DVD (Digital Versatile
5 Disk)-RAM (Random Access Memory), and, when
a differential signal between a sum of two signals in
a detector at one side and a sum of two signal in
a detector at the other side which are divided into
two sides by a track axis of the disk exceeds
10 a predetermined value, the step of removing determines
that detrack components which have failed to detect the
recording information are contained in the detection
signals, and selects and removes at least one of the
two signals in the detector at one side and the two
15 signals in the detector at the other side according to
the differential signal.

16. A disk processing method according to
claim 11, wherein the detection signals have four
detection signals from a quartered detector which
receives reflected lights from DVD-R or DVD-RW, and,
20 when a differential signal between a sum of two signals
in a detector at one side and a sum of two signals in
a detector at the other side which are divided into
two sides by a track axis of the disk exceeds
25 a predetermined value, the step of removing determines
that detrack components which have failed to detect the
recording information are included in the detection

signals, and removes at least one of the two signals in the detector at one side and the two signals in the detector at the other side.

17. A disk processing method according to
5 claim 11, wherein the detection signals have four detection signals from a quartered detector which receives reflected lights from DVD-RAM, DVD-R, or DVD-RW, and

when a differential signal between a sum of two
10 signals in a detector at one side and a sum of two signals in a detector at the other side which are divided into two sides by a track axis of the disk exceeds a predetermined value, the step of removing determines that detrack components which have failed to
15 detect the recording information are included in the detection signals,

identifies a type of the disk, and selects and removes one of the two signals in the detector at one side and the two signals in the detector at the other side according to the differential signal when the disk
20 is DVD-RAM, and

identifies a type of the disk, and removes at least one of the two signals in the detector at one side and the two signals in the detector at the other side when the disk is DVD-R or DVD-RW.
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18. A disk processing method according to
claim 11, wherein the step of removing passes the

detection signals through filters to output the same, and removes the detrack components.

19. A disk processing method according to
claim 11, wherein the step of removing removes the
5 detrack components by giving predetermined potentials
to input terminals of the processing section of the
disk device instead of supplying the detection signals
thereto.

20. A disk processing method according to
10 claim 11, wherein the step of removing removes the
detrack components in a state where the detection
signals are not supplied to the input terminals of the
processing section of the disk device so that nothing
is connected thereto.